PALM INTRANET

Day : Thursday
Date: 8/28/2003

Time: 15:27:55

Inventor Name Search

Enter the **first few letters** of the Inventor's Last Name.
Additionally, enter the **first few letters** of the Inventor's First name.

Last Name	**First Name**	
Uhler	Michael	Search

To go back use Back button on your browser toolbar.

Back to PALM | ASSIGNMENT | OASIS | Home page

h e eb cg b e f e

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=AND			
L17	Gagna-claude.in.	2	L17
L16	Thatcher-david-R$.in.	14	L16
L15	L10 not L13	15	L15
L14	L13 and L12	13	L14
L13	L10 and L11	34	L13
L12	L9 and ((cationic adj lipid) or lipofectamine)	17	L12
L11	L9 and (ligand or transferrin or penton)	93	L11
L10	L9 and (polylysine or histone)	49	L10
L9	L7 and (transfection or transformation)	156	L9
L8	L7 same (transfection or transformation or infection)	6	L8
L7	L4 or L5	569	L7
L6	L5 or L5	288	L6
L5	L3 same (microarray or array)	288	L5
L4	L3 same (surface or bead or plate or dish)	432	L4
L3	(immobilized) adj (DNA or RNA or plasmid or (nucleic adj acid))	1689	L3
L2	(Surface adj transfection) same (expression adj procedure)	3	L2
L1	Uhler-michael-D$.in.	3	L1

END OF SEARCH HISTORY

WEST

Help Logout Interrupt

Main Menu | Search Form | Posting Counts | Show S Numbers | Edit S Numbers | Preferences | Cases

Search Results -

Term	Documents
(7 NOT 4).USPT,PGPB,JPAB,EPAB,DWPI,TDBD.	1
(L7 NOT L4).USPT,PGPB,JPAB,EPAB,DWPI,TDBD.	1

Database: US Patents Full-Text Database; US Pre-Grant Publication Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Search: Mathiowitz-edith.in.

Refine Search

Recall Text Clear

Search History

DATE: Friday, August 29, 2003 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=AND		
L8	L7 not L4	1	L8
L7	L5 same (surface or bead or microsphere or nanosphere or chip or microchip or array or microarray)	19	L7
L6	L5 same ((viral or penton) adj protein)	0	L6
L5	L2 same ((cationic adj lipid) or liposome or lipofectamine)	312	L5
L4	L3 same (surface or bead or microsphere or plate or (solid adj support))	30	L4
L3	L2 same (transferrin or FGF or liposome or lipofectamine)	388	L3
L2	L1 same (polylysine or histone or polycationic)	636	L2
L1	((nucleic adj acid) or vector or gene) same conjugate	8215	L1

Status: Path 1 of [Dialog Information Services via Mode[redacted]]

Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 31060000009999...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSSS?
Status: Signing onto Dialog
 ****
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
Status: Connected

Dialog level 02.19.00D

Last logoff: 27aug03 09:39:42
Logon file001 28aug03 15:55:34
           *** ANNOUNCEMENT ***
                     ***
--File 654 - US published applications from March 15, 2001 to the
present are now online. Please see HELP NEWS 654 for details.

                     ***
--File 581 - The 2003 annual reload of Population Demographics is
complete. Please see Help News581 for details.

                     ***
                    ***
--File 990 - NewsRoom now contains February 2003 to current records.
File 992 - NewsRoom 2003 archive has been newly created and contains
records from January 2003. The oldest months's records roll out of
File 990 and into File 992 on the first weekend of each month.
To search all 2003 records BEGIN 990, 992, or B NEWS2003, a new
OneSearch category.
                     ***
--Connect Time joins DialUnits as pricing options on Dialog.
See HELP CONNECT for information.
                     ***
                     ***
--SourceOne patents are now delivered to your email inbox
as PDF replacing TIFF delivery. See HELP SOURCE1 for more
information.
                     ***
--Important news for public and academic
libraries. See HELP LIBRARY for more information.
                     ***
--Important Notice to Freelance Authors--
See HELP FREELANCE for more information
                     ***
NEW FILES RELEASED
***World News Connection (File 985)
***Dialog NewsRoom - 2003 Archive (File 992)
***TRADEMARKSCAN-Czech Republic (File 680)
***TRADEMARKSCAN-Hungary (File 681)
***TRADEMARKSCAN-Poland (File 682)
                     ***
UPDATING RESUMED
                     ***
RELOADED
***Population Demographics -(File 581)
***CLAIMS Citation (Files 220-222)

REMOVED

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                    ***

      >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
      >>>    of new databases, price changes, etc.       <<<
                    ****
KWIC is set to 50.
HILIGHT set on as '*'
* * * * See HELP NEWS 225 for information on new search prefixes
and display codes

***                                    ***


File   1:ERIC  1966-2003/Aug 13
       (c) format only 2003 The Dialog Corporation

      Set  Items  Description
      ---  -----  -----------
Cost is in DialUnits
?b 155, 5, 73
       28aug03 15:55:45 User259876 Session D538.1
            $0.32    0.090 DialUnits File1
     $0.32  Estimated cost File1
     $0.03  TELNET
     $0.35  Estimated cost this search
     $0.35  Estimated total session cost   0.090 DialUnits


SYSTEM:OS  - DIALOG OneSearch
  File 155:MEDLINE(R)  1966-2003/Aug W4
        (c) format only 2003 The Dialog Corp.
*File 155: Medline has been reloaded and accession numbers have
changed.  Please see HELP NEWS 155.
  File   5:Biosis Previews(R)  1969-2003/Aug W4
        (c) 2003 BIOSIS
  File  73:EMBASE  1974-2003/Aug W4
        (c) 2003 Elsevier Science B.V.
*File  73: Alert feature enhanced for multiple files, duplicates
removal, customized scheduling. See HELP ALERT.

      Set  Items  Description
      ---  -----  -----------
?s (immobilized (w) (DNA or RNA or plasmid or (nucleic (w) acid))
>>>Unmatched parentheses
?s (immobilized (w) (DNA or RNA or plasmid or (nucleic (w) acid)))
         83296  IMMOBILIZED
       1927670  DNA
       1029326  RNA
        177515  PLASMID
        235999  NUCLEIC
       3447349  ACID
        207738  NUCLEIC(W)ACID
     S1    529  (IMMOBILIZED (W) (DNA OR RNA OR PLASMID OR (NUCLEIC (W)
               ACID)))
?s s1 (s) (surface or bead or plate or microarray or array)
           529  S1
       1112531  SURFACE
         12830  BEAD
        121284  PLATE
         17385  MICROARRAY
         75102  ARRAY
     S2    125  S1 (S) (SURFACE OR BEAD OR PLATE OR MICROARRAY OR ARRAY)
?s s2 (s) (transfection or infection or transformation)
           125  S2
        155608  TRANSFECTION
       1738010  INFECTION
        303842  TRANSFORMATION
```

S3 3 S2 (S) [redacted]RANSFECTION OR INFECTION OR TR[redacted]FORMATION)
?rd
...completed examining records
S4 1 RD (unique items)
?t s4/3,k/all

4/3,K/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

14654349 22175458 PMID: 12188196
Nonradioactive detection of retroviral-associated RNase H activity in a microplate-based, high-throughput format.
McLellan N; Wei X; Marchand B; Wainberg M A; Gotte M
McGill University, Montreal, Quebec, Canada.
BioTechniques (United States) Aug 2002, 33 (2) p424-9, ISSN 0736-6205 Journal Code: 8306785
Document type: Evaluation Studies; Journal Article; Validation Studies
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

None of the available antiretroviral drugs that are currently used in the clinic to treat *infection* with HIV-1 is directed against the RNase H active site of the reverse transcriptase. Here we developed a nonradioactive, 96-well *plate* assay designed to be used for high-throughput screening of compounds capable of inhibiting the RNase H activity of HIV-1 reverse transcriptase. We employed...

... prehybridized with a DNA oligonucleotide that contained a single biotinylated residue at its 5'-terminus to ensure its attachment to streptavidin-coated microplates. The uncleaved, *immobilized* *DNA*/tRNA substrate was detected through the use of established ELISA protocols. Incubation with purified HIV-1 reverse transcriptase initiated RNase H degradation and caused a...
?ds

Set Items Description
S1 529 (IMMOBILIZED (W) (DNA OR RNA OR PLASMID OR (NUCLEIC (W) AC-ID)))
S2 125 S1 (S) (SURFACE OR BEAD OR PLATE OR MICROARRAY OR ARRAY)
S3 3 S2 (S) (TRANSFECTION OR INFECTION OR TRANSFORMATION)
S4 1 RD (unique items)
?s s2 (s) (cell or cells)
125 S2
6189953 CELL
4413849 CELLS
S5 14 S2 (S) (CELL OR CELLS)
?rd
...completed examining records
S6 6 RD (unique items)
?t s6/3,k/all

6/3,K/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

11264258 98142616 PMID: 9481617
Na,K-ATPase mRNA levels and plaque load in Alzheimer's disease.
Chauhan N B; Lee J M; Siegel G J
Molecular and Cellular Neuroscience Laboratory, Edward Hines Jr. Veterans Affairs Hospital, IL 60141, USA.
Journal of molecular neuroscience - MN (UNITED STATES) Dec 1997, 9 (3) p151-66, ISSN 0895-8696 Journal Code: 9002991
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM

Record type: Completed

... 1.2 cm in each of two adjacent sections. Each cortical column of 180-micron width was divided into four depths orthogonal to the pial *surface* between the pia and the white matter. Amyloid plaques were counted in the same regions of adjacent sections. In addition, alpha 3-mRNA grain clusters...

... matched controls. No significant difference ($p < 0.2$) was found with respect to alpha 1- or alpha 3-mRNA in cerebellar cortex or individual Purkinje *cells* among any of the groups. In addition, there was a trend toward an inverse correlation between the levels of alpha 3-mRNA and of diffuse...

6/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11202550 98079221 PMID: 9418026
Detection of Campylobacter jejuni in food and poultry viscera using immunomagnetic separation and microtitre hybridization.
Lamoureux M; MacKay A; Messier S; Fliss I; Blais B W; Holley R A; Simard R E
Faculte de medecine veterinaire, Universite de Montreal, St-Hyacinthe, Quebec, Canada.
Journal of applied microbiology (ENGLAND) Nov 1997, 83 (5) p641-51, ISSN 1364-5072 Journal Code: 9706280
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... were detected from samples of chicken liver, gall bladder, muscle and contaminated milk and chicken meat after an enrichment step by using immunomagnetic capture of *cells* with monoclonal antibody against a specific outer membrane protein of thermophilic Campylobacter. The detection of captured *cells* was achieved using two different hybridization methods. In one of the methods, the captured *cells* were lysed by guanidine isothiocyanate and the 23S rRNA was reacted with a microtitre *plate* -immobilized rDNA probe specific for thermophilic Campylobacter. In the other method, the captured *cells* were subjected to lysis by ultrasonication and the genomic DNA reacted with a microtitre *plate*-*immobilized* *RNA* probe specific for Camp.jejuni. Detection of the RNA-DNA hybrids formed in the wells was carried out using a monoclonal anti-RNA-DNA hybrid...

6/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10855333 97206711 PMID: 9122824
[Functional analysis of an autoantigen reactive B cell clone derived from MRL/MP-lpr/lpr mice]
Kobayashi K; Hamano T; Kakishita E
Second Department of Internal Medicine, Hyogo College of Medicine.
Ryumachi. Rheumatism (JAPAN) Dec 1996, 36 (6) p844-55, ISSN 0300-9157 Journal Code: 0153217
Document type: Journal Article ; English Abstract
Languages: JAPANESE
Main Citation Owner: NLM
Record type: Completed

... on the pathogenesis of systemic lupus erythematosus with massive involvement of abnormal T lymphocytes in the spleen and lymphonodes. However, a direct role of B *cells* of MRL/lpr mice in autoimmune responses

is not clear until the time. In the present study, to investigate the characteristic of B *cells* of the mice, we tried to establish a B *cell* clone after hybridization between splenic B *cells* of these mice and 2.52 M, a HAT selective medium sensitive mutant B *cell* line in the presence of polyethylene glycol and dimethyl sulfoxide and examined its response to autoantigens. MRL27.4, a subclone of a resulting hybridoma, expressed IgM, B220, IKk, ICAM-1, and LEA-1 on the *cell* membrane as well as CD5 molecules by analysis with flow microfluorometory (FMF). Also, MRL27.4 was shown to exhibit rosette formation against blood *cells* treated with bromelain (Br-RBC) at a frequency of more than 95%, and to express DNA-receptor (DNA-R) on its *surface* by FMF analysis with biotin-labeled ssDNA. In contrast, the parental 2.52 M did not form rosettes with Br-RBC and the expression of DNA-R on the *cell* membrane of 2.52 M was significantly less compared with that of MRL27.4. Interestingly, MRL27.4 produced a high titer of IgM-anti-ssDNA antibodies and IL-6 after treatment with the purified RBC membrane or *immobilized* *DNA*. On the other hand, the parental 2.52 M neither produce IgM-anti-ssDNA antibodies nor IL-6 under the same conditions. The results suggest that MRL27.4 is an autoantigen reactive B *cell* clone derived from MRL/lpr mice and its *surface* DNA-R, by itself, function to autoantigens. In this process, there might be an autocrine network mediated by IL-6. In conclusion, MRL27.4 provides a good model for the study on the direct function of B *cells* of MRL/lpr mice during abnormal immune responses to autoantigens.

6/3,K/4 (Item 4 from file: 155)

10363979 96167203 PMID: 8599632

The biophysics of DNA hybridization with immobilized oligonucleotide probes.

Chan V; Graves D J; McKenzie S E
Department of Chemical Engineering, University of Pennsylvania, Philadelphia, USA.

Biophysical journal (UNITED STATES) Dec 1995, 69 (6) p2243-55, ISSN 0006-3495 Journal Code: 0370626
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

A mathematical model based on receptor-ligand interactions at a *cell* *surface* has been modified and further developed to represent heterogeneous DNA-DNA hybridization on a solid *surface*. The *immobilized* *DNA* molecules with known sequences are called probes, and the DNA molecules in solution with unknown sequences are called targets in this model. Capture of the...

... different mechanisms by which targets can hybridize with the complementary probes: direct hybridization from the solution and hybridization by molecules that adsorb nonspecifically and then *surface* diffuse to the probe. The results indicate that nonspecific adsorption of single-stranded DNA on the *surface* and subsequent two-dimensional diffusion can significantly enhance the overall reaction rate. Heterogeneous hybridization depends strongly on the rate constants for DNA adsorption/desorption in the non-probe-covered regions of the *surface*, the two-dimensional (2D) diffusion coefficient, and the size of probes and targets. The model shows that the overall kinetics of DNA hybridization to DNA on a solid support may be an extremely efficient process for physically realistic 2D diffusion coefficients, target concentrations, and *surface* probe densities. The implication for design and operation of a DNA hybridization *surface* is that there is an optimal *surface* probe density when 2D diffusion occurs; values above that optimum do not increase the capture rate. Our model predicts capture rates in agreement with those...

... done to improve heterogeneous hybridization: 1) the solution phase

target molecules should be about 100 bases or less in size to speed solution-phase and *surface* diffusion; 2) conditions should be created such that reversible adsorption and two-dimensional diffusion occur in the *surface* regions between DNA probe molecules; 3) provided that 2) is satisfied, one can achieve results with a sparse probe coverage that are equal to or better than those obtained with a *surface* totally covered with DNA probes.

6/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

05484734 87163526 PMID: 2881846
A 'Southern Cross' method for the analysis of genome organization and the localization of transcription units.
Potter H; Dressler D
Gene (NETHERLANDS) 1986, 48 (2-3) p229-39, ISSN 0378-1119
Journal Code: 7706761
Contract/Grant No.: A121848; PHS; GM-17088; GM; NIGMS; GM35967; GM; NIGMS
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

... attempt to hybridize to the gel-separated fragments of as many as ten unlabelled digests immobilized on parallel sheets of filter paper. A two-dimensional *array* of hybridization spots is revealed on each recipient paper, indicating which radioactive and non-radioactive DNA fragments have sequences in common. A restriction map can...

... areas of a segment of cloned genomic DNA can be identified by cross-hybridizing a set of radioactive restriction fragments from the genomic clone against *immobilized* *RNA* from a *cell* type of interest.

6/3,K/6 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

11021969 BIOSIS NO.: 199799643114
Detection of Listeria monocytogenes inoculated in dairy products by AmpliScript.
AUTHOR: Laberge I; Blais B W(a); Pandian S
AUTHOR ADDRESS: (a)Lab. Serv. Div., Food Prod. Inspection Branch, Agric. Agri-Food Can., Ottawa, ON K1A 0C6**Canada
JOURNAL: Food Microbiology (London) 14 (3):p283-290 1997
ISSN: 0740-0020
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: AmpliScript is a system that enhances detection of PCR products by transcription of amplicons and subsequent immunoenzymatic detection of RNA:DNA hybrids in a microliter *plate*. PCR primers specific for the L. monocytogenes hlyA gene were used to generate an amplicon containing a bacteriophage T7 promoter sequence. When the AmpliScript system...

...applied in the assay of various Listeria and non-Listeria bacteria, specific signals were obtained to L. monocytogenes upon hybridization of transcripts with a microliter *plate*-*immobilized* *DNA* probe. This system provided significant improvements in the detectability of amplicons compared with the traditional agarose gel electrophoresis approach, and greatly helped to overcome the...

...effects of components from food matrices or enrichment broths on the PCR. AmpliScript provided important advantages for routine food analysis

by using a convenient microliter *plate* format, and eliminated the need for expensive sample preparation techniques by allowing direct detection of L. monocytogenes *cells* in enrichment cultures.

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?ds

Set     Items   Description
S1        529   (IMMOBILIZED (W) (DNA OR RNA OR PLASMID OR (NUCLEIC (W) AC-
            ID)))
S2        125   S1 (S) (SURFACE OR BEAD OR PLATE OR MICROARRAY OR ARRAY)
S3          3   S2 (S) (TRANSFECTION OR INFECTION OR TRANSFORMATION)
S4          1   RD (unique items)
S5         14   S2 (S) (CELL OR CELLS)
S6          6   RD (unique items)
?s s2 and ((polylysine or histone) and (ligand or transferrin or penton))
             125  S2
            8956  POLYLYSINE
           55115  HISTONE
          264478  LIGAND
           57817  TRANSFERRIN
             627  PENTON
      S7       0  S2 AND ((POLYLYSINE OR HISTONE) AND (LIGAND OR
                  TRANSFERRIN OR PENTON))
?s s2 (s) (transfection (w) complex)
             125  S2
          155608  TRANSFECTION
         1181910  COMPLEX
      S8       0  S2 (S) (TRANSFECTION (W) COMPLEX)
?s s2 and (transfection)
             125  S2
          155608  TRANSFECTION
      S9       0  S2 AND (TRANSFECTION)
?s s2 (s) ((cationic (w) liposome) or lipofectamine)
             125  S2
           48125  CATIONIC
           37546  LIPOSOME
            1336  CATIONIC(W)LIPOSOME
            1049  LIPOFECTAMINE
     S10       0  S2 (S) ((CATIONIC (W) LIPOSOME) OR LIPOFECTAMINE)
?s s2 and review
             125  S2
         1384816  REVIEW
     S11       3  S2 AND REVIEW
?rd
...completed examining records
     S12       3  RD (unique items)
?t s12/3,k/all

 12/3,K/1     (Item 1 from file: 5)
DIALOG(R)File   5:Biosis Previews(R)
(c) 2003 BIOSIS. All rts. reserv.
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14154260 BIOSIS NO.: 200300148289

Fundamentals of DNA-chip/array technology for comparative gene-expression analysis.

AUTHOR: Saluz Hans Peter(a); Iqbal Javeed; Limmon Gino V; Ruryk Andre; Wu Zhihao

AUTHOR ADDRESS: (a)Department of Cell and Molecular Biology, Hans Knoell Institute for Natural Product Research, Beutenbergstrasse 11, D-07745, Jena, Germany**Germany E-Mail: saluz@pmail.hki-jena.de

JOURNAL: Current Science (Bangalore) 83 (7):p829-833 10 October 2002 2002
MEDIUM: print
ISSN: 0011-3891
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: In this article we *review* the state-of-the-art of DNA-chip/

array technology and its application in biological and medical sciences. With many of the technological hurdles to overcome *array* fabrication, many academic groups and numerous specialized companies are developing new tools and strategies for exploiting this promising field. DNA-microarrays are fabricated either by in situ synthesis or by conventional means, e.g. amplification of specific target DNA, followed by immobilization on the *surface* of various miniaturized substrates. The *immobilized* *DNA* molecules are hybridized with labelled probes. One single experiment can encompass aspects of many thousands of genes simultaneously. The unprecedented speed and parallelism of this...

12/3,K/2 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

11537733 EMBASE No: 2002110466
Protein microarray technology
Templin M.F.; Stoll D.; Schrenk M.; Traub P.C.; Vohringer C.F.; Joos T.O.
M.F. Templin, NMI Natural and Med. Sci. Institute, University of Tubingen, Markwiesenstr. 55, 72770 Reutlingen Germany
AUTHOR EMAIL: joos@nmi.de
Trends in Biotechnology (TRENDS BIOTECHNOL.) (United Kingdom) 01 APR 2002, 20/4 (160-166)
CODEN: TRBID ISSN: 0167-7799
PUBLISHER ITEM IDENTIFIER: S0167779901019102
DOCUMENT TYPE: Journal ; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 55

Microarray technology allows the simultaneous analysis of thousands of parameters within a single experiment. Microspots of capture molecules are immobilized in rows and columns onto a...

...complex formation within each microspot. Such miniaturized and parallelized binding assays can be highly sensitive, and the extraordinary power of the method is exemplified by *array*-based gene expression analysis. In these systems, arrays containing *immobilized* *DNA* probes are exposed to complementary targets and the degree of hybridization is measured. Recent developments in the field of protein microarrays show applications for enzyme...
MEDICAL DESCRIPTORS:
...probe; gene targeting; DNA hybridization; protein DNA interaction; protein protein interaction; ligand binding; genome analysis; proteomics; RNA translation; binding affinity; enzyme substrate; receptor binding; immunoassay; *review*; priority journal

12/3,K/3 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

10859217 EMBASE No: 2000341238
DNA microchips: Technical and practical considerations
Sanchez-Carbayo M.; Bornmann W.; Cordon-Cardo C.
M. Sanchez-Carbayo, Division of Molecular Pathology, Memorial Sloan-Kettering Cancer Ctr., 1275 York Avenue, New York, NY 10021 United States
AUTHOR EMAIL: mscarbayo@ibercom.com
Current Organic Chemistry (CURR. ORG. CHEM.) (Netherlands) 2000, 4/9 (945-971)
CODEN: CORCF ISSN: 1385-2728
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 91

...expression analyses. The power of this technology is that it allows

```
the profiling of thousands of genes in one single experiment. There are two
main *array*-based technologies: cDNA and oligonucleotide arrays. cDNA
arrays consist of microscope slides or nylon membranes containing hundreds
to thousands of *immobilized* *DNA* probes, which are hybridized to
fluorescent or radioactive complementary cDNA obtained from a target
sample. Oligonucleotide chips differ in that probes are 20-25 mer selected
oligonucleotides, which are bound to glass substrates and that the DNA
obtained from a target sample can only be fluorescently labeled. In this
*review*, we describe the different types of DNA-chips, the steps involved
in the production of microchips, the methodological and technical aspects
of microchip utilization, and...
MEDICAL DESCRIPTORS:
...sequence analysis; DNA probe; molecular hybridization; device; molecular
interaction; genetic analysis; diagnostic test; single nucleotide
polymorphism; genotype; image analysis; data analysis; gene expression;
genetic variability; *review*
?ds

Set     Items   Description
S1        529   (IMMOBILIZED (W) (DNA OR RNA OR PLASMID OR (NUCLEIC (W) AC-
                 ID)))
S2        125   S1 (S) (SURFACE OR BEAD OR PLATE OR MICROARRAY OR ARRAY)
S3          3   S2 (S) (TRANSFECTION OR INFECTION OR TRANSFORMATION)
S4          1   RD (unique items)
S5         14   S2 (S) (CELL OR CELLS)
S6          6   RD (unique items)
S7          0   S2 AND ((POLYLYSINE OR HISTONE) AND (LIGAND OR TRANSFERRIN
                 OR PENTON))
S8          0   S2 (S) (TRANSFECTION (W) COMPLEX)
S9          0   S2 AND (TRANSFECTION)
S10         0   S2 (S) ((CATIONIC (W) LIPOSOME) OR LIPOFECTAMINE)
S11         3   S2 AND REVIEW
S12         3   RD (unique items)
?s s2 (s) (genetially (w) (modify or modified))
            125  S2
             10  GENETIALLY
          96471  MODIFY
         447087  MODIFIED
     S13      0  S2 (S) (GENETIALLY (W) (MODIFY OR MODIFIED))
?ds

Set     Items   Description
S1        529   (IMMOBILIZED (W) (DNA OR RNA OR PLASMID OR (NUCLEIC (W) AC-
                 ID)))
S2        125   S1 (S) (SURFACE OR BEAD OR PLATE OR MICROARRAY OR ARRAY)
S3          3   S2 (S) (TRANSFECTION OR INFECTION OR TRANSFORMATION)
S4          1   RD (unique items)
S5         14   S2 (S) (CELL OR CELLS)
S6          6   RD (unique items)
S7          0   S2 AND ((POLYLYSINE OR HISTONE) AND (LIGAND OR TRANSFERRIN
                 OR PENTON))
S8          0   S2 (S) (TRANSFECTION (W) COMPLEX)
S9          0   S2 AND (TRANSFECTION)
S10         0   S2 (S) ((CATIONIC (W) LIPOSOME) OR LIPOFECTAMINE)
S11         3   S2 AND REVIEW
S12         3   RD (unique items)
S13         0   S2 (S) (GENETIALLY (W) (MODIFY OR MODIFIED))
?logoff
       28aug03 16:10:41 User259876 Session D538.2
            $3.57    1.116 DialUnits File155
               $1.26  6 Type(s) in Format  3
            $1.26  6 Types
     $4.83  Estimated cost File155
            $6.07    1.084 DialUnits File5
               $3.50  2 Type(s) in Format  3
            $3.50  2 Types
     $9.57  Estimated cost File5
```

```
          $9.85    1.06 DialUnits File73
             $5.10  2 Type(s) in Format  3
          $5.10  2 Types
    $14.95  Estimated cost File73
          OneSearch, 3 files,  3.266 DialUnits FileOS
     $3.50  TELNET
    $32.85  Estimated cost this search
    $33.20  Estimated total session cost   3.356 DialUnits


### Status: Signed Off. (16 minutes)
```